

The Examiner has rejected claims 1, 4 - 6, 11, 12, 14 and 16 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 3,535,591 to Holmquest, and has rejected claims 8-10 under 35 U.S.C. § 103 as being unpatentable over Holmquest in view of U.S. Patent 5,642,052 to Earle. Claims 2 and 13 have been rejected under 35 U.S.C. § 103 as being unpatentable over Holmquest in view of the Court Decision In re Aller, 105 USPQ 233. Claims 3 and 15 have been rejected under 35 U.S.C. § 103 as being unpatentable over Holmquest in view of the Court Decision In re Bosch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Applicant respectfully submits that the Holmquest patent and the Earle patent do not teach or suggest the claimed invention for the reasons discussed below. Accordingly, the Examiner is requested to withdraw the above-mentioned grounds for rejecting the claims.

Specifically, the Applicant respectfully submits that the Holmquest patent and the Earle patent fail to teach or suggest the use of “a delay circuit for delaying initial operation of the sensing circuits for a predetermined period each time the supervisory circuit is powered on”, as recited in amended independent claim 1. Rather, the Holmquest patent, in column 4, lines 32 to 33 thereof, discloses a time delay in operation of relay 23 which is preset but variable as a function of input parameters. That is, the delay disclosed in the Holmquest patent is based on the sensing circuits detecting the input parameters. Hence, the delay disclosed in the Holmquest patent can be considered a post-detection delay. In contrast, the amended independent claim 1 refers to a delay occurring *prior* to the sensing circuits being operational. Thus, the delay recited in amended independent claim 1 is a pre-detection delay in contrast to the time delay based on the sensing circuit disclosed in the Holmquest patent.

In addition, the delay disclosed in the Holmquest patent refers to the delay of opening or closing a relay based on the input parameters. For example, if the difference between an input parameter and a threshold value is small, the response time for closing the relay 23 is slow. However, if there is a large difference between the input parameter and the threshold value, the response time for closing relay 23 is short. This takes “care of momentary variations in voltage, frequency or phase (col. 1, lines 71-72). Thus, the delay disclosed in the Holmquest patent reduces false trips

related to minor fluctuations in the input parameter by adjusting the response time for closing the relay 23.

In contrast, the delay in the embodiment of the invention recited in amended independent claim 1, does not delay the operation of a relay. Instead, the delay is used to delay the initial operation of the sensing circuits each time the supervisory circuit is powered on. This is quite different from the delay disclosed in the Holmquest patent.

Similarly, the delay disclosed in the Earle patent refers to “a delay circuit 110 that allows the display 108 to be maintained even after the plug 16 has been removed from the receptacle 22” (col. 6, lines 38 – 40). Specifically, the delay disclosed in the Earle patent allows a display to maintain a reading so that a user can still observe the reading after AC power is removed from the device. This is not related to delaying the initial operation of sensing circuits as recited in amended independent claim 1.

Furthermore, the Holmquest patent and the Earle patent fail to teach or suggest the detection of any of the fault conditions recited in independent claims 17 and 18 such as an open neutral in any one of the AC line inputs, an open first phase, an open second phase, an open third phase, reverse wiring of the first phase to the neutral, reverse wiring of the second phase to the neutral, reverse wiring of the third phase to the neutral, and duplicative wiring of any of said phases. Rather, the system disclosed in the Holmquest patent is limited to the detection of an over or under voltage condition, an over or under frequency condition, and an abnormal phase sequence condition.

The device disclosed in the Earle patent is a single phase ground fault circuit interrupting (GFCI) device. Therefore, the invention disclosed in the Earle patent cannot check for fault conditions in more than one phase. In addition, the Earle patent discloses, “Notably, not all fault conditions are necessarily tested for. If, for example, the ground and neutral lines 36, 38 are reversed, or if two hot wires have been connected to the receptacle 22, or if a ground path exists, but is of poor quality, the tester 10 may not detect such conditions” (col. 4, lines 54 – 58).

Amended independent claim 12 contains limitations similar to those found in amended independent claim 1 and should also be found patentable. Dependent claims

2 - 11, and 13 - 16 depend either directly or indirectly from amended independent claims 1 or 12 and should also be found patentable.

In view of the foregoing, it is believed that the application, including claims 1-18, is in condition for allowance and notice to this effect is respectfully requested. Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the telephone number indicated below.

Respectfully submitted,



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